

Traffic Safety Facts

Research Note

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Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United States, 2002

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Summary

In 2002, motor vehicle traffic crashes were the leading cause of death for every age 3 through 33. Because of the young lives consumed, motor vehicle traffic crashes ranked 3rd in terms of the years of life lost, i.e., the number of remaining years that the person is expected to live had they not died, behind only cancer and diseases of the heart. The table (overleaf) shows the ten leading causes of death by age group in 2002. The age groups reflect categories of interest to NHTSA in terms of Child-Restraint Programs (Toddlers, Infants and Young Children), New Drivers (Youth and Young Adults), Other Adults and the Elderly.

Background

This Research Note examines the status of motor vehicle traffic crashes as a leading cause of death in the United States in 2002. This note reflects an update of a prior research note (DOT HS 809 695) that was based on the mortality data for 2001. It is based on a study of the ranking of 68 causes of death, which have been adopted by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration (NHTSA). This study was originally prompted by a number of unanswered questions regarding adequate background material and appropriate information pertaining to the general concept of motor vehicle

traffic crashes as a leading cause of death. Although the National Center for Health Statistics (NCHS), in its annual report on mortality, publishes detailed tabulations of the leading causes of death, the fatalities due to motor vehicle traffic crashes are “lumped” under the very general category of *Unintentional Injuries*. Fatalities due to motor vehicle traffic crashes comprise a significant proportion of all fatalities due to unintentional injuries, especially at younger ages and this has prompted NHTSA to separate motor vehicle crashes as an individual cause of death in this report. NCSA added the computation of the years of lost life to the conventional rank ordering of the causes of death in order to highlight the tremendous toll that motor vehicle traffic crashes have on the younger population. In fact, while motor vehicle traffic crashes ranked 8th overall as a cause of death, they were ranked as high as 3rd in terms of the years of life lost.

Methodology

Years of Life Lost: This is the number of remaining years that the person is expected to live had they not died. The number of years of life lost due to a particular cause is the aggregate of years of life lost for all persons that died due to that cause. The expected years of remaining life is calculated using standard tables of life expectancy by age (Life expectancy at selected ages for 2002, NCHS).

The NCSA-adopted listing of 68 causes of death is comprehensive in that all underlying causes are represented. Fifty-one of these 68 adopted causes reflect the underlying causes based on *internal* morbid bodily conditions, while sixteen NCSA-adopted causes reflect the underlying causes based on *external* factors such as crashes and acts of violence and the remaining cause reflects all other diseases. This 68-cause listing is not an arbitrary listing, but is generally in close agreement with a special listing of death causes used by the NCHS to report on leading causes of death in the United States. The latter differs from the NCSA listing primarily in causal areas related to *unintentional injuries* (accidental death). While NCHS uses the combined cause of unintentional injuries in its reports of leading causes of death, this study separates out the various causes that comprise unintentional injuries like fatalities in motor vehicle traffic crashes, accidental falls, poisoning, motor vehicle non-traffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by NCHS. The NCSA cause listing also differs from the NCHS listing for causes of infant mortality. While NCHS, for reasons of public health interest, uses a detailed 130 cause listing, the NCSA list combines it into one major cause – conditions originating in the *perinatal period*.

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Top 10 Leading Causes of Death in the United States for 2002, by Age Group¹

RANK	Cause and Number of Deaths										Years Of Life Lost ²
	Infants Under 1	Toddlers 1 - 3	Children 4 - 7	Young Children 8 - 15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages
							25-34	35-44	45-64		
1	Perinatal Period 14,106	Congenital Anomalies 474	MV Traffic Crashes 495	MV Traffic Crashes 1,584	MV Traffic Crashes 6,327	MV Traffic Crashes 4,446	MV Traffic Crashes 6,933	Malignant Neoplasms 16,085	Malignant Neoplasms 143,028	Heart Disease 576,301	Heart Disease 696,947
2	Congenital Anomalies 5,623	MV Traffic Crashes 410	Malignant Neoplasms 449	Malignant Neoplasms 842	Homicide 2,422	Homicide 2,650	Suicide 5,046	Heart Disease 13,688	Heart Disease 101,804	Malignant Neoplasms 391,001	Malignant Neoplasms 557,271
3	Heart Disease 500	Accidental Drowning 380	Congenital Anomalies 180	Suicide 428	Suicide 1,810	Suicide 2,036	Homicide 4,489	MV Traffic Crashes 6,883	Stroke 15,952	Stroke 143,293	Stroke 162,672
4	Homicide 303	Homicide 366	Accidental Drowning 171	Homicide 426	Malignant Neoplasms 805	Accidental Poisoning 974	Malignant Neoplasms 3,872	Suicide 6,851	Diabetes 15,518	Chronic Lwr. Resp. Dis. 108,313	Chronic Lwr. Resp. Dis. 124,816
5	Septicemia 296	Malignant Neoplasms 285	Exposure to Smoke/Fire 151	Congenital Anomalies 345	Accidental Poisoning 679	Malignant Neoplasms 823	Heart Disease 3,165	Accidental Poisoning 6,007	Chronic Lwr. Resp. Dis. 14,755	Influenza/ Pneumonia 58,826	Diabetes 73,249
6	Influenza/ Pneumonia 263	Exposure to Smoke/Fire 163	Homicide 134	Accidental Drowning 270	Heart Disease 449	Heart Disease 518	Accidental Poisoning 3,116	HIV 5,707	Chronic Liver Disease 13,313	Alzheimer's 58,289	Influenza/ Pneumonia 65,681
7	Nephritis/ Nephrosis 173	Heart Disease 144	Heart Disease 73	Heart Disease 258	Accidental Drowning 345	Accidental Drowning 238	HIV 1,839	Homicide 3,239	Suicide 9,926	Diabetes 54,715	Alzheimer's 58,866
8	MV Traffic Crashes 120	Influenza/ Pneumonia 92	Influenza/ Pneumonia 41	Exposure to Smoke/Fire 170	Congenital Anomalies 254	Congenital Anomalies 186	Diabetes 642	Chronic Liver Disease 3,154	MV Traffic Crashes 9,412	Nephritis/ Nephrosis 34,316	MV Traffic Crashes 44,065
9	Stroke 117	MV Non-Traffic Crashes ⁴ 69	Septicemia 38	Chr. Lwr. Resp. Dis. 131	MV Non-Traffic Crashes ⁴ 121	Accidental Falls 134	Stroke 567	Stroke 2,425	HIV 5,821	Septicemia 26,670	Nephritis/ Nephrosis 40,974
10	Malignant Neoplasms 74	Septicemia 63	Benign Neoplasms 36	MV Non Traffic Crashes ⁴ 115	Acc. Dischg. Of Firearms 113	HIV 130	Congenital Anomalies 475	Diabetes 2,164	Accidental Poisoning 5,780	Hypertension Renal Dis. 17,345	Septicemia 33,865
ALL³	28,034	4,079	2,586	6,760	16,239	15,390	41,355	91,140	425,727	1,811,720	2,443,387
											All Causes 100%(37,341,511)

¹When ranked by specific ages, motor vehicle crashes are the leading cause of death for age 3 through 33.

²Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

³Not a total of top 10 causes of death. ⁴A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

Source: National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

Note: The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings.